

REMARKS

No claims have been added, canceled or amended.

Accordingly, claims 1-5, 7, 8, 10, 11 and 13-26 are currently pending in the application.

The specification has been amended to overcome the Examiner's objection.

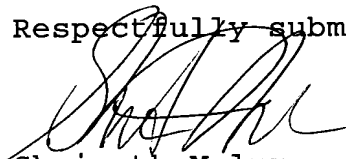
Claims 1 and 19 stand rejected as being unpatentable over Ogden (U.S. Patent No. 5,727,336). This rejection is traversed as follows.

Ogden does not disclose an inner fabric layer followed by an open-cell foam and an outer fabric layer, nor an inner fabric layer followed by a foam and backed by a nonwoven top sheet. At column 12, lines 60-63, Ogden states that cushioning layer 56 is made of cross-linked polyethylene or other heat-formable foam material. In response to Applicant's argument that Ogden does not disclose an open-cell foam, the Examiner contends that Ogden at column 11, lines 10-35 teaches that the foam material may be polyurethane or sponge rubber among other foams. The Examiner alleges that sponge rubber is an open-cell foam. This is incorrect. As disclosed in the attached description (Appendix A), sponge rubbers are closed cell rubbers which are impervious to air, water, and dust.

Pursuant to MPEP §2001.06(c), Applicant hereby informs the Patent Office that the patent which issued from a related application, U.S. Patent No. 6,048,810, is involved in litigation in the United States District Court for the District of Maine (Baychar, Inc. et al. v. Frisby Technologies, Inc. et al., Civil Docket No. CV-01-28-B). Any material information arising from this litigation will promptly be brought to the attention of the Patent Office.

Examination is respectfully requested.

Respectfully submitted,



Shrinath Malur
Registration No. 34,663
Attorney for Applicant

MATTINGLY, STANGER & MALUR
104 East Hume Avenue
Alexandria, Virginia 22301
(703) 684-1120
Date: June 4, 2001

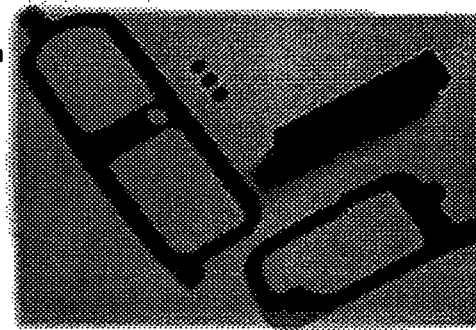
SPONGE RUBBER

HOME ABOUT US WHAT'S NEW PRODUCTS INDUSTRIES QS ISO CUSTOM FABRICATION NEWS CONTACT US EMPLOYMENT

To return, click on the products button above

Sponge Rubber

Sponge rubbers are closed cell rubbers which are impervious to air, water, and dust. They are most commonly used for weather stripping and gasketing applications. Sponge rubbers are formed by combining ingredients and then molding the compound under heat and pressure. During the molding process, gas is used to create the unique cellular structure of the sponge. An array of compounds, such as Neoprene, EPDM, SBR, and Vinyl Nitrile are available to meet specific needs such as resistance to heat, flame, ozone or petroleum products.



Common Applications:

- Weather stripping for automotive glass applications
- Gasketing for acoustical/speaker mounts
- Sealing exterior lighting (headlights/tail lamps)
- HVAC/Air handling system seals and thermal insulation
- Vibration isolators for interior automotive components

Available Sizes:

Thickness: .1.6mm - 25mm

Width: 2mm - 1000mm

Length: 2mm - 1700M

Piqua Technologies is a leading applications solutions provider when it comes to fabricating sponge rubber. Our state-of-the-art production facility and application engineers have extensive experience developing unique solutions. We welcome examining your manufacturing challenges. To see examples of our applications solutions, click here: [CUSTOM FABRICATING](#). Or, [CONTACT US](#) to discuss your specific sponge rubber requirements.

Polymer	Nitrile-EPDM-SBR Blend		EPT		EPDM		Neoprene	
ASTM	RE 42 EI	RE 43 EI	RE 41	RE 41	RE 42	RE 43	RE 41 EI	RE 42 EI
D-1056	SCE 42 EI	SCE 43 EI					SCE 41 EI	SCE 42 EI
ASTM	2A2/2C2	2A3/2C3	2A1 F2	2A1 F2	2A2 F2	2A3 F2	2C1 EI F2	2C2 EI F2
D-1056-85	F1	F1						
Mil R-6130B				Grade C	Grade C	Grade C	Grade A	Grade A or
Type 2				Soft	Soft	Med	or B Soft	B Soft
25%	5-9	9-13	2-5	2-5	5-9	9-13	2-5	5-9
Compression								
Deflection								
(PSI)								
Shore 00	40-50	50-70	15-35	30-50	40-60	50-70	30-50	40-60
Durometer								
(Approx.)								
Density	7-11	8-13	4-7	9-14	9-14	12-20	7-13	8-14
(Approx.								
p.c.f.)								
Water	5	5	5	5	5	5	5	5
Absorption by								
Weight								
(Max.%)								
Temperature	-70 to	-70 to	-90 to	-90 to	-90 to	-90 to	-70 to	-70 to
Range	225 F	225 F	257 F	257 F	257 F	257 F	200 F	200 F
Weather	Good	Good	Good	Excellent	Excellent	Excellent	Excellent	Excellent
Resistance								
Linear	5	5	5	5	5	5	5	5
shrinkage								
(Max)% 7								
days at 158								
degrees F								
Flammability							150	150
Resistance %								
(Maximum								
Weight								
Increase)								
Tensile	50	70	30	60	65	70	60	70
Strength								
(PSI)								
(Typical)								
Elongation%	150	120	150	160	180	200	150	130
(typical)								
FM VSS#302	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Mil R-6130B							Pass	Pass
UL 94 HBF	Pass	Pass	Pass				Pass	Pass
UL 94 HFI	Pass	Pass	Pass				Pass	Pass
Fungus	Pass	Pass						
Resistance								
ASTM								
G21-70								

The technical data contained in this chart is for information purposes only.
Please contact Piqua's Program Development Department to discuss product suitability for individual applications.

CONTACT INFORMATION

Copyright © 1999 Piqua Technologies, Inc. All Rights Reserved
Published by Marketing Options

